

REMARKS

Claims 1-11 are pending in this application.

Claim 1 has been amended to recite that “wherein said laminate contains at least one layer structure of (A)/(C)/(B) or (A)/(C)/(A).” Support for this amendment appears throughout the specification and claims as originally filed. Specifically, support appears in the specification at page 5, lines 11-19, page 23, lines 5-22 and page 24, lines 3-12.

The applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated **January 23, 2004**.

In view of amended claim 1 and the remarks set forth below, further and favorable consideration is respectfully requested.

I. Claims 1, 5-9 and 11 are rejected under 35 U.S.C. §102(e) as being anticipated by Itoh et al. (U.S. Patent No. 6,042,906). (Office action paragraph no. 2)

Itoh discloses a flavor-retaining multi-layer plastic container including an intermediate layer of a cyclic olefin copolymer and inner and outer layers of a non-cyclic olefin resin or an ethylene/vinyl alcohol copolymer jointed together via an adhesive. The flavor-retaining plastic multi-layer container includes inner and outer layers of a non-cyclic olefin resin, and an intermediate layer of a cyclic olefin copolymer adhered together via adhesive resin layers.

With regard to claim 1, the Examiner cites Itoh in column 6, lines 52-56, describing Fig. 4:

“the wall comprises, from the inner side toward the outer side, an inner layer 21 of a non-cyclic olefin resin, a first intermediate layer 22 containing a cyclic olefin copolymer, a second intermediate layer 23 containing an ethylene/vinyl alcohol copolymer and serving as a gas barrier resin layer, a third intermediate layer 24 containing a cyclic olefin copolymer and an outer layer 25 of a non-cyclic olefin resin.”

That is, the Examiner is apparently taking Itoh's first intermediate layer 22 (cyclic olefin copolymer) as the alicyclic polymer layer (A) in claim 1; second intermediate layer 23 (ethylene/vinyl alcohol copolymer) as thermoplastic resin (B); and third intermediate layer 24 or outer layer 25 as layer (C).

In view of the following, this rejection is respectfully traversed.

Anticipation under 35 USC § 102 requires that a single prior art reference teach each and every element of the claimed invention.

Present claim 1 requires that layer (C) comprises an alicyclic polymer and a thermoplastic resin; that is, both of these components are in layer (C). This can be seen, for example, on page 28, lines 17-21, of the specification, in which there is always at least 1% of the alicyclic polymer (a) and at least 10% of the thermoplastic resin (b). Itoh describes third intermediate layer 24, which is a cyclic olefin copolymer, and outer layer 25, which is a non-cyclic olefin resin. Neither of these layers contains two components. Itoh et al. neither teach nor suggest laminates comprising at least one layer of resin composition comprising an alicyclic polymer and a thermoplastic resin. Therefore, Itoh et al. do not describe a layer corresponding to layer (C) in claim 1.

Accordingly, Itoh et al. does not anticipate any of claims 1, 5-9, and 11.

Claim 1 has been amended to require that the laminate contains at least one layer structure of (A)/(C)/(B) or (A)/(C)/(A). Again, Itoh et al. do not teach a layer corresponding to present layer (C), let alone such a layer provided between layers (A) and (B) or (A) and (A), as required by amended claim 1.

Itoh et al. describe that: "Referring to FIG. 4 illustrating, in cross section, the structure of the barrel 5 of another embodiment on an enlarged scale, the wall comprises, from the inner side toward the outer side, an inner layer 21 of a non-cyclic olefin copolymer, a first intermediate layer 22 containing a cyclic olefin copolymer, a second intermediate layer 23 containing an ethylene/vinyl alcohol copolymer and serving as a gas barrier resin layer, a third intermediate layer 24 containing a cycloolefin copolymer and an outer layer 25 of a non-cyclic olefin resin (column 6, lines 48-57)."

The above laminate contains a layer structure of (B1)/(A)/(B2)/(A)/(B1). However, none of these layers contains two components. Itoh et al. do not disclose a layer corresponding to the resin composition layer (C), as required by present claim 1.

At column 15, lines 1-4, Itoh et al. disclose that: "The copolymer (COG) is obtained by the random polymerization of a non-cyclic olefin with a cyclic olefin in the presence of a widely-known vanadium catalyst or a metallocene catalyst."

This copolymer (COG) is not a resin composition containing a cycloolefin copolymer and polyolefin but a copolymer such as an ethylene/cyclic olefin copolymer resin which is available from Mitsui Petrochemical Co. in the trade name of APEL (column 15, lines 5-6, and column 21, lines 50-60).

Applicants note that Itoh et al. do not teach a layer corresponding to the resin composition layer (C) of present claim 1. Further, Applicants submit that Itoh et al. do not teach a laminate containing at least one layer structure of (A)/(C)/(B) or (A)/(C)/(A), as required by present claim 1.

In view of the above, it is submitted that Itoh et al. do not teach each and every element of

the presently claimed invention, as required for anticipation under 35 USC § 102. Accordingly, the Examiner is respectfully requested to withdraw this rejection.

II. Claim 2 is rejected under 35 U.S.C. §103(a) as being unpatentable over Itoh et al. in view of Kakugo et al. (U.S. Patent No. 5,141,994). (Office action paragraph no. 3)

The Examiner states that “Itoh et al fail to disclose that the resin composition layer C is a low density polyolefin having a long period of at most 275 angstroms Kakugo et al. teaches a low density polyolefin having a long period of less than 186 angstroms ...”

Again, as discussed above, Itoh et al. do not teach or suggest a layer meeting the limitations of layer (C) in claim 1, let alone a laminate containing at least one layer structure of (A)/(C)/(B) or (A)/(C)/(A).

Kakugo et al. do not cure the deficiencies of Itoh et al. because Kakugo et al. do not teach or suggest a layer meeting the limitations of layer (C) in claim 1, let alone a laminate containing at least one layer structure of (A)/(C)/(B) or (A)/(C)/(A).

Regarding the Examiner’s statement that “resin composition layer C is a low density polyolefin”, Applicant’s note that present resin composition layer (C) is **not** a low density polyolefin. In fact, claim 2 limits “the thermoplastic resin **contained in** the resin composition layer (C).”

Therefore, although Kakugo et al. may disclose a low density polyolefin meeting the long period limitation of claim 2, modifying Itoh et al. to include the polyolefin of Kakugo, would not

produce the invention as claimed in claim 1 or claim 2.

Accordingly, it is submitted that nothing in Itoh et al. or Kakugo et al. taken alone or together, render the claimed invention obvious within the meaning of 35 USC § 103.

Further, Applicant's submit that when resin composition layer (C) is arranged between the alicyclic polymer layer (A) and the thermoplastic layer (B), delamination of the resulting laminate is substantially prevented. More particularly, in laminates having such a layer structure, moisture permeability can be controlled, tearability or cuttability is enhanced, and separation at an interface between the individual layers does not occur.

Comparative data is summarized in Table 1 of the present specification. The results set forth in Table 1 demonstrate that laminates containing a layer structure of (A)/(C)/(B) (Examples 1 and 3) exhibit excellent transparency (low Haze values), excellent appearance upon stretching and excellent cuttability.

In addition, the laminate containing a layer structure of polypropylene layer (B)/the resin composition layer (C)/hydrogenated ring-opening polymer layer (A) (Example 5) has a haze value of 20. When stress was applied to this laminate by stretching and folding, none of clouding, wrinkling and torn line, occurred. Further, the respective layers were fully bonded to one another, and no delamination occurred. This laminate was also excellent in tearability and cuttability.

Conversely, the comparison laminate containing a layer structure of polyethylene layer (B)/the resin composition layer (C)/Polyethylene layer (B) (Comparative Experiment 1) exhibited inferior transparency, inferior appearance upon stretching and inferior cuttability.

Further, the comparison laminate containing a layer structure of polypropylene layer (B)/hydrogenated ring-opening polymer layer (A) (Comparative Example 2), upon application of stress by stretching and folding, clouding, wrinkling and/or torn line, of the laminate occurred. When strong stress was applied to the laminate, delamination occurred.

When the resin composition layer (C) is arranged between two alicyclic polymer layers (A), laminates having high surface smoothness are obtained.

In this regard, the Examiner's attention is again directed to the comparative data summarized in Table 1 of the present specification. The results set forth in Table 1 demonstrate that the laminate containing a layer structure of (A)/(C)/(A) (Example 2) exhibits excellent transparency (low Haze values), excellent appearance upon stretching, excellent surface smoothness and excellent cuttability.

Conversely, the comparison laminate containing a layer structure of polyethylene layer (B)/the resin composition layer (C)/Polyethylene layer (B) (Comparative Experiment 1) is inferior in: transparency, appearance upon stretching, surface smoothness and cuttability.

In view of the foregoing, it is submitted that nothing in the applied references, taken alone or together, render the claimed invention obvious within the meaning of 35 USC § 103. Accordingly, the Examiner is respectfully requested to withdraw this rejection.

III. Claims 3, 4 and 10 are rejected under 35 U.S.C. §103(a) as being unpatentable over Itoh et al. in view of Hirose et al. (U.S. Patent No. 6,165,573). (Office action paragraph no. 5)

The Examiner states that "Itoh et al. fail to disclose that the alicyclic polymer forming

alicyclic polymer layer A is a norbornene polymer wherein the norbornene polymer is a hydrogenated product of a ring-opening polymer of a norbornene monomer", and cites Hirose et al. for the disclosure of an alicyclic layer with such a polymer.

In view of the following, this rejection is respectfully traversed.

Please see the above discussions regarding Itoh, and comparative data.

Again, Itoh et al. do not disclose a layer with the limitations of present layer (C), let alone a laminate having at least one layer structure of (A)/(C)/(B) or (A)/(C)/(A), as presently required. Hirose does not cure the deficiencies of Itoh et al. Please see the discussions set forth above.

In view of the above, the discussions presented responsive to the previous rejections, and the discussed data, it is submitted that nothing in Itoh et al. or Hirose, taken alone or together, render the claimed invention obvious within the meaning of 35 USC § 103. Accordingly, the Examiner is respectfully requested to withdraw this rejection.

In view of the aforementioned amendments and accompanying remarks, it is submitted that the claims are in condition for immediate allowance. Early notice to that effect is earnestly solicited.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other

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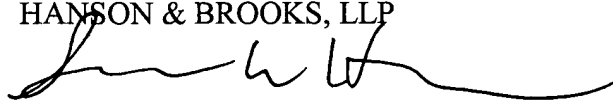
Response dated June 23, 2004

Reply to OA of **January 23, 2004**

fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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